

Reflections of FEC - Dr. Robert Holte (Vice Dean, Chair of FEC)

This article is normally written by the Dean, Dr. Gregory Taylor, but this is a special year in which many of his duties, including this one, have been delegated to the Vice Dean to allow Dr. Taylor to focus on the Faculty's unit review, the completion of the Centennial Centre for Interdisciplinary Science, and external relations. It was also a special year because it was the first year in which electronic preparation of professors' annual reports was mandatory and the first year the President's Review Committee was active. As Chair of FEC, I will comment here on both of these initiatives. But first I will discuss the overall FEC process for assigning merit increments and why some professors do not receive the merit increment that their department Chair recommends.

As stipulated in the Faculty Agreement, each Faculty receives a number of merit increments to distribute to its academic staff that is exactly 1.2 times the number of professors and FSOs in the Faculty. This year the Faculty of Science had 318 academic staff in the merit pool, and therefore had 381.6 merit increments to distribute. The first two steps of the distribution process are familiar to you: (1) an annual report is submitted by each academic staff member and reviewed by the department Chair; (2) after meeting with each person individually, the Chair submits to the Dean a merit increment recommendation with a justification. All this information is then distributed to all FEC members who prepare for the FEC meeting by studying every case and comparing each to other cases at a similar career stage with the aim of ensuring that like cases receive the same merit increment across the entire Faculty. At the FEC meeting itself, every case is discussed individually

in order of increasing seniority, and FEC is free to raise, lower, or agree with the Chair's recommendation, subject only to the overall constraint that the final number of merit increments assigned must not exceed 1.2 times the size of the merit pool. After it has gone through all the cases once, FEC has invariably assigned a few more increments than it is allowed and must revisit borderline cases to stay within its allowance.

In addition to the 40-hour weeklong FEC meeting itself, the members of FEC devote an enormous amount of time and careful thought to their preparation. They are all to be highly commended for the effort and care they invest in the process. The demands on Chairs are even greater than on other FEC members, since they spend countless hours reviewing the annual reports in their departments, preparing their recommendations, and meeting with individuals in advance of the other FEC members beginning their work. Chairs come to the FEC meeting armed with a vast repository of supplementary information about the cases they will have to present so that they are ready for detailed questions that might arise, and have eloquent opening remarks for each case. It truly astounds me the amount of preparation the Chairs do on behalf of their departmental colleagues.

The result of all this effort, dialogue, and attention to detail is what is surely one of the very best academic annual evaluation processes on the planet.

One might think that after all the thought and effort Chairs invest in arriving at their recommendations, it is a travesty that any of their recommendations should be adjusted by FEC. However, there are several very good reasons why FEC's final merit



Dr. Wolfgang Jäger, newly appointed Fellow of the Royal Society of Canada (along with Mike Belosevic and Robert Creaser).

increment decision for a person might differ from the Chair's recommendation.

1. Because there is a fixed number of increments to be distributed, the merit distribution process is inherently comparative, there cannot be an absolute scale saying that under such-and-such conditions a person is guaranteed to receive a merit increment of 1.0. To emphasize this, consider a scenario in which all the same people were in the merit pool two years in a row and each person performed identically in the two years except for one person, whose performance was vastly superior in the second year causing FEC to award that person two half-increments more than in the first year. Because the total number of increments available is fixed, those two half-increments would have to be recovered by awarding two fewer half-increments to the other people. At first glance it seems odd, perhaps even downright unfair, to award different merit increments in successive years for identical performance, but that is precisely what the comparative nature of the process requires.

2. Exacerbating the previous reason is the fact that the set of people eligible for merit increments changes from year to year. The most obvious reason for this is that some academic staff leave the Faculty (e.g. through retirement) and some new people are added. If the people departing have a performance that is less meritorious on average than the new people, the competition for merit increments is intensified by this change in the pool. A specific change in the pool this year, which caused increased competition, was the addition of two steps at the top of the merit scales for Associate Professors and FSOs. In the previous year, 15 academic staff were either at the top of their scale or so close that only a partial increment could be awarded to them. These people each contributed 1.2 merit increments to the total number available but were eligible to receive only a tiny fraction of these increments, thereby creating approximately 32 half-increments that FEC could distribute to others. This year, because of the two additional steps on the top of the scales, FEC did not have any such "free" half-increments to distribute. Compared to the previous year FEC had to reduce other people's merit increments in order to reward the meritorious performance of the 15

academic staff who were previously at or very near the top of their scale. A more subtle change to the pool, which might have some impact on the 2009 FEC deliberations, is that newly hired academic staff contribute 1.2 merit increments to the number available but are automatically awarded a 1.0, leaving 0.2 increments per newly hired person free to be distributed to others in the pool. Each of the past two years has seen significant numbers of new people hired, thereby generating roughly 8 half-increments for "free" distribution. Although there is quite a bit of hiring underway this year, the numbers are not as great as in previous years, so fewer "free" half-increments will be generated through this mechanism.

3. Chairs make their recommendations in isolation, they are not given a quota to work with and do not know the other Chairs' recommendations at the time when they meet with individuals to decide on their recommendations. Chairs therefore must estimate how their academic staff will compare to academic staff in other departments in a given year and this, of course, cannot be done exactly. Typically this results in the Chairs' recommendations adding up to more than the total available number of increments. This year, for example, there were 381.6 merit increments available for distribution but the Chairs' recommendations added up to 405.5, meaning, roughly speaking, that 48 people (15% of the pool) necessarily would receive a final merit award half an increment lower than the Chair's recommendation.

4. Chairs also do not know how other Chairs will judge borderline cases, so it can happen that two people from different departments with essentially identical performances are given different recommendations by their respective Chairs. It is FEC's job to notice such discrepancies and correct them, either by reducing the higher of the two recommendations or by increasing the lower one. Even the latter action results in someone in the pool having their final merit increment less than their Chair's recommendation because the extra increments needed to increase a Chair's recommendation for one person must be taken from someone else.

The preceding reasons are all fundamental aspects

of the process that cause a certain number of final merit increment decisions to be less than the Chairs' recommendations. There is nothing anyone can do about them short of radically changing the process. However, there are several things that you can do to minimize the probability that you will find yourself disappointed by FEC's decision.

5. Make sure your annual report is complete. i.e., that it includes accurate accounts of all the professional activities (teaching, research, and service) that you engaged in during the reporting period. FEC cannot reward what it does not know about.

6. Make sure that the quality and importance of your activities is apparent to FEC. For example, what was your contribution to a multi-authored publication? How special was the invitation you received to speak at a conference? Within your field of study, how prestigious were the journals in which you published? A natural place to put this in your annual report is in the "Additional Data" section at the end.

7. Make sure your Chair can defend his/her recommendation effectively if FEC questions it. In meeting with your Chair, explain the strengths and the weaknesses of your annual performance so that the recommendation is as accurate and defensible as possible.

8. Strive to improve the excellence of your teaching, research, and service each year. The analysis that Dr. Taylor is doing for the unit review reveals that the "performance bar" is continually rising in the Faculty of Science, i.e., by many measures our per-capita performance is rising each year.

The final merit increments awarded by FEC were distributed as follows. There were 13 increments at the 0.0 level, the vast majority of which were 0.0b ("performance requirements for an increment have not been met but performance is acceptable notwithstanding"), 28 at the 0.5 level, 140 at 1.0, 95 at 1.5, 39 at 2.0, and 3 at 2.5.

In addition to awarding merit increments, FEC is also charged with deciding on tenure for professors, continuing appointments for FSOs, and promotion

applications. The results of these decisions were as follows. This year 29 professors in the Faculty of Science were eligible to be considered for tenure, either through an early tenure consideration or at the end of first or second probation. Of these, 6 cases (21%) were brought forward for consideration. With deliberations complete, all were granted. A total of 57 Associate Professors were eligible to apply for promotion to full Professor. Six applications for promotion were submitted (11% of eligible candidates), and all were granted promotion. Of the 8 FSOs eligible for promotion, 2 submitted an application, and both were granted.

Let me now comment on the two new initiatives related to FEC last year, the mandatory submission of professors' annual reports and the PRC.

This year as part of the FEC process we introduced a web-based annual report for professors. The electronic FEC form allowed FEC members to more effectively locate specific information on more than 300 reports, rather than manually searching through the reports as was done in previous years. This was especially useful when trying to compare information across multiple annual reports. FEC members also appreciated the automatic calculation of journal rankings, which saved considerable time since more than 1200 new refereed publications were reported. We also heard from several individuals who had entered their supervisory information on the beta version of the annual report the previous year, how



much they appreciated the import feature that allowed them to automatically insert these students for the current year. One of the features of the electronic system was paper sharing, where a single copy of any paper co-authored by multiple academic staff members was kept instead of multiple copies. This is an important feature since it eliminates the possibility that the same paper will be reported differently by different staff members. In the past, when FEC encountered a paper being reported differently, such as being included as a

refereed paper in one annual report but as a non-refereed paper in another, or being included in two different reporting years by two different staff members, an intense FEC discussion occurred and the result was often detrimental to the evaluations of both staff members.

Despite the overall success of this system, there were several problems encountered. The most serious problem was an obscure MySQL (the database that sits behind the system) session problem that very infrequently displayed the annual report of someone else who was simultaneously logged in. A second problem occurred in the feature that shared papers between co-authors. Unfortunately, the problem of identifying the names of staff members from the plethora of ways that a name can be entered on a paper is difficult and some common names of graduate student authors were mistakenly identified as academic staff authors and had to be fixed manually. Finally, paper entry was awkward due to the way that author names and venue names had to be entered for the paper sharing feature and the auto-calculation of journal rankings. These three issues are being addressed for next year's annual report and many other suggestions are being incorporated, along with planned changes. One of next year's major changes will be invisible to most academic staff members, but will be important to department Chairs as the Chair's recommendation form is put on-line. We appreciate all of the feedback we received this year, including many specific constructive suggestions for improvement.

The President's Review Committee (PRC) is a major addition to the FEC process, whose aim is to have an independent person monitor FEC's tenure and promotion deliberations to ensure that the proper procedures are followed and that the Faculty's criteria for tenure and promotion are fairly applied in all cases. I refer you to the newest version of Article 13 in the Faculty Agreement for details. The PRC representative on FEC is an active member, not a passive observer, with voting privileges on all decisions, including merit increment decisions. We are very lucky to have had an excellent PRC representative assigned to us, Dr. Faye Hicks of the Department of Civil Engineering. Dr. Hicks devoted the same effort and thoughtfulness to our FEC process as every other

non-Chair FEC member and participated fully in the meeting. The Faculty of Science definitely has benefitted from her presence – thank you Dr. Hicks.

I would like to close by reminding you what a talented group of colleagues we are fortunate to have in the Faculty of Science. In many different areas we are poised to lead the University in its quest to become recognized as one of the top 20 publicly funded universities in the world. It is a humbling and inspiring pleasure for me each year to read the annual accomplishments of Science's many world-class researchers and brilliant teachers. Some of the highlights can be found on the Faculty's Awards and Accolades web page and I would encourage you all to glance at this list each year to remind yourself of the award-winning environment in which you work. And hopefully, I will see your name on that web page in the not-too-distant future!



Dr. Gane Wong, iCORE Chair (\$4M) in Biosystems Informatics

Observations on the Faculty of Science Evaluation Process

Sarah Gleeson, Earth & Atmospheric Sciences

Roger Moore, Physics

Joerg Sander, Computing Science

Introduction

Like in previous years, the newly elected members of FEC have been asked to provide their observations and thoughts regarding the faculty evaluation process. Much of what has been written in recent years about FEC and the evaluation criteria remains valid. This year, however, the allocated budget was tighter than in the previous year due to the increase in the increment limit for Associate Professors and FSOs. This meant that

those who had previously reached the increment limit on their scale could now again receive increments; 15 additional people were eligible for increments compared to previous years. This situation will likely be also an issue next year because the increment limit was raised by two full increments.

The Assessment Process

The voting committee is comprised of 14 people including the Acting Dean, the Chairs of the departments, 2 elected Full Professors, 3 elected Associate Professors and a representative of the President's Review Committee.

Approximately a week before the committee meets, the Annual reports, sabbatical applications and tenure and promotion materials are made available to the committee members. Reviewing all these files prior to the meetings is an important and time consuming part of the overall process; it allows committee members to compare files and identify cases which will need further clarification by the Chairs during the meetings. This year we had the files of 305 Professors and Faculty Service Officers to assess (which do not include the annual reports of the department Chairs and a few others who are dealt with directly by the Dean). When we receive the files, we are also informed of the total number of increments recommended by the Chairs and the shortfall in the overall budget. This year, the difference was a total of 47.8 half increments (as opposed to 16 half increments last year) that had to be cut—a large number, meaning that on average 1 in 6.5 of the Chair's recommendations had to be reduced by half an increment.

During the week that FEC meets, each case is discussed in turn, in the order of base salary. At the beginning of each case, the corresponding department Chair briefly justifies the recommendation based on the annual report and possibly additional information. Committee members have then the opportunity to ask for further clarifications. Typically, in cases where the

committee essentially agrees with the Chair's recommendation, the discussion is minimal and moves to a vote quickly. However, if committee members have questions or comments that indicate uncertainty about the appropriateness of the recommended number of increments, then the strengths and weaknesses of the case are typically discussed at greater length. After the first round of discussion is completed a vote is called in which committee members can vote in favour or against the Chair's recommendation, or abstain. If there is no majority for a supportive or negative decision, the discussion continues until a majority is reached in a vote. If the committee votes down the recommendation, the FEC Chair (Vice Dean) suggests a different increment level and the voting recommences; the new recommendation was typically one half-increment lower, although there were also rare cases in which the committee had argued for an increase and the new recommendation was one half increment higher.



Dr. John Waldron, Gesner Medal (Atlantic Geoscience Society)

At the end of the week, after all files have been discussed and if FEC is still short increments the process of "claw-back" begins. This is where the committee is forced to go back and find cases that will be considered for a reduction by half an increment. The files that are reconsidered are cases that were passed by the smallest margins, and the committee has to decide who

of these loses a half increment. However, it was decided this year not to "claw-back" from the Assistant Professors.

One of the major issues facing the new members on FEC is that there are real differences in philosophy and research products from different departments. It was the immediate challenge for the new members in the committee to understand the expectations in different disciplines. Although, reading all files before the meetings helps forming a basic understanding, many questions were asked of the respective Chairs, especially during the first day of FEC, in order to "calibrate" the expectations in different departments and fields of research.

During this year's FEC meetings, there has been somewhat of a philosophical shift in the way that merit increments are being awarded. Within our collective agreement it is possible that a faculty member can be awarded a 0b, meaning "that performance requirements for an increment have not been met but performance is acceptable notwithstanding". Therefore, any increment over and above this is rewarding a better than acceptable performance in any one of the areas of teaching, research and service. An increment of 1.0 therefore, is not a "right", but already constitutes two "extra" half increments, which must be justified by an Annual report showing a person who is not "just doing his or her job".

A Chair's recommendation is based on the three "cornerstones" teaching, research and service in most cases, and FEC considers all of them as important. While excellence in a single aspect is rewarded by increments, this excellence can typically not compensate for deficits in one of the other aspects (if they are expected from a faculty member).

The expectations do rise with seniority. For Assistant Professors the emphasis is on the quality of research and teaching, although service is also rewarded if present, whereas Associate professors were expected to show some level of service to the department, university or scientific community. For Full Professors towards the top of the salary scale there is an expectation of excellence in teaching, research and service, service both at the University of Alberta and to the scientific community.

The next subsections attempt to address each of the components teaching, research, and service separately.

Teaching

Assessing the quality of teaching is difficult. FEC is provided with the summary Instructor Designated Questionnaires (IDQ) statistics and faculty members with teaching scores over the 75th percentile are highlighted as are those at the other end of the scale. Teaching does matter at FEC. Those with excellent teaching evaluations are rewarded, while poor evaluations can often lead to a loss of an extra half increment, if the poor evaluations seem to indicate a systematic problem

(and the Chair's recommendation does not reflect that already). FEC is, however, also willing to excuse to some extent a few bad scores if there are understandable reasons for the low scores (e.g., if it is the first time a course is taught, or scores are always low for this course independent of the instructor). Credit in cases of low IDQ scores was also given to those who showed evidence of striving to improve them.



Dr. Glen Loppnow, 3M National Teaching Fellow

Research

One of the most striking gains from our FEC experience was an appreciation for the research productivity in the Faculty. The mean number of peer reviewed and arguably high quality publications per department is indeed impressive. However, it should be noted that nearly all departments have a small number of highly productive researchers that skew the average number of papers per person in a department to some degree, and there are also (sub-) disciplines within departments where publishing less than 3 papers per year is typical for excellent researchers.

How does FEC assess such variability? In order to avoid paper-counting as the only means of assessment, the impact-factor of the journals or the rating of the conferences (in computing science) are commonly discussed. If the work is published in a lower rank journal the Chair will often be asked to comment on whether the journal is appropriate for that specialization. In many cases, it falls to the Chair to comment on the quality of the work and, thus, if you feel you have published a significant piece of research in a given year you must impress this upon your Chair. Some discussion also revolves around the contribution of authors in multi-authored papers, and FEC places importance on

papers published with HQP. It is important that your role in the contribution and that of your students is clearly communicated on the annual report and to your Chair. Finally, it is a mistake to think that increments will be awarded just for publishing large numbers of papers. It depends on your area of research, and the quality of the papers plays a much more important role. It is possible to get a high merit increment with few high-



Dr. Duane Froese and colleagues discovered the oldest known ice in North America

quality publications, and even in cases where high incrementation coincides with a larger number of publications, it is our observation that, in general, a typically much smaller subset of high quality publications was the basis for the recommendation. FEC also values major national and international research related awards highly. Many of the people this year that were awarded 2 or 2.5 increments received such awards.

Service

Service is another component that varies from department to department and within individual departments. In some departments Assistant Professors have little to no service obligations. However, if service to the department is contributed above the baseline expectation, this is typically awarded by FEC. At the Associate and Full Professor level, service both to the University and to the external scientific community is expected. The issue then becomes judging whether that service has been beyond some expected baseline. In an effort to understand the extent of service, the Chairs were routinely asked what sort of time commitment was involved in the committee work listed on the annual report. The Chairs were very vocal in their support of faculty members who are making a significant contribution



Dr. Ian Mann and Kyle Murphy designed www.aurorawatch.ca, a website for aurora watchers, science buffs and the public that will help determine the best viewing periods for the celestial light show.

to their departments in this way and FEC did generally consider exceptional service as a justification for an “extra” half increment. FEC also looks for service to the scientific community particularly at the senior Associate Professor and Full Professor level. It is expected that professors show evidence of leadership or recognition in their scientific fields. Lack of such a service component at this level is noted by FEC and can result in reduced incrementation.

Conclusion

Although not a perfect process, we observed that the FEC process is extremely fair across the whole Faculty. In particular, the measured and non-partisan approach of the Chairs of the department really sets the tone of the meetings. The discussion is focused around the strengths and weaknesses of the material listed in the Annual Report and personalities are not an issue at any stage. Equally, we did not observe an intentional bias either for or against particular departments or subject areas. One thing that was very evident from the week was the amount of effort required by the department Chairs. As well as serving as full FEC members which required them to read all the annual reports they also had to prepare, and more importantly, defend their recommendations for their own department faculty. The committee's questioning often required significant details about a faculty member's activities and the chairs had clearly done a considerable amount of preparation to be able to field the vast majority of questions. Indeed the committee's decisions often hinged on the additional explanations, data and insights provided by the Chairs.